Driving at Night

Courtesy of the National Safety Council

raffic death rates are three times greater at night than during the day, according to the National Safety Council. Yet many of us are unaware of night driving's special hazards or don't know effective ways to deal with them.

Driving at night is more of a challenge than many people think. It's also more dangerous.

Why is night driving so dangerous? One obvious answer is darkness. Ninety percent of a driver's reaction depends on vision, and vision is severely limited at night. Depth perception, color recognition and peripheral vision are compromised after sundown.

Older drivers have even greater difficulties seeing at night. A 50-year-old driver may need twice as much light to see as well as a 30-year old.

Another factor adding danger to night driving is fatigue. Drowsiness makes driving more difficult by dulling concentration and slowing reaction time.

Alcohol is the single most significant factor in fatal traffic crashes, playing a part in more than half of all motor vehicle-related deaths. That makes weekend nights more dangerous. More fatal crashes take place on Friday and Saturday nights than at any other time in the week.

Fortunately, you can take several effective measures to minimize these after-dark dangers by preparing your car and following special guidelines while you drive.

The National Safety Council recommends these steps:

-Prepare your car for night driving. Clean headlights, taillights, signal lights and windows once a week, more often if necessary.

-Aim your headlights properly. Mis-aimed headlights blind other drivers and reduce your ability to see the road.

-Don't drink and drive. Not only does alcohol severely impair your driving ability but it also acts as a depressant. Just one drink can induce fatigue. Also, avoid smoking when you drive. Smoke's nicotine and carbon monoxide hamper night vision.

-If there is any doubt, turn your headlights on. Lights will not help you see better in early twilight, but they'll make it easier for other drivers to see you. Being seen is as important as seeing.

-Reduce your speed and increase your following distances. It is more difficult to judge other vehicle's speeds and distances at night.

-Don't overdrive your headlights. You should be able to stop inside the illuminated area. If you're not, you are creating a blind crash area in front of your vehicle.

-When following another vehicle, keep your headlights on low beams so you don't blind the driver ahead of you.

-If an oncoming vehicle doesn't lower beams from high to low, avoid glare by watching the right edge of the road and using it as a steering guide.

-Make frequent stops for light snacks and exercise. If you're too tired to drive, stop and get rest.

-If you have car trouble, pull off the road as far as possible. Warn approaching traffic at once by setting up flares or reflecting triangles near your vehicle and 300 feet behind it. Turn on flashers and the dome light. Stay off the roadway and get passengers away from the area.

Observe night driving safety as soon as the sun goes down. Twilight is one of the most difficult times to drive, because your eyes are constantly changing to adapt to the growing darkness.

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ORM: Theory versus Practice

By Maj. Peter Kind 65th Air Base Wing Safety Lajes Field, Azores ell, since my time in the Safety world is drawing to an end, I figured that perhaps now would be the best time to tell my "there I was" story. There is quite a difference between knowledge and wisdom. If we could teach wisdom, most of us Safety professionals would soon be out of work. Here's another story that will hopefully help a few folks learn that "fire is hot," without having to touch it for themselves, and to grow in wisdom by learning to apply their knowledge in the right circumstances.

I had been serving as the squadron Chief of Safety for just over a year. We were a flying unit, but our squadron of about 150 people also had maintainers, intelligence analysts and, of course, the necessary administration. It was September of '97, and COMACC (General Richard Hawley at the time) had just called for an Operational Risk Management (ORM) down day. We had a string of flight mishaps in ACC during the months of July and August, and General Hawley felt it was time to take a break and refocus. ORM seemed like the right tool to do just that.

Although ORM was relatively new to the Air Force, I had all the training to date, and I prepared a bang-up presentation for the squadron (if I do say so myself). We had briefings and brainstorming sessions and ORM analyses on previous ground and flight mishaps. We spent an entire day focused on ORM in almost any on- or off-duty scenario. I had to write up our reports for higher headquarters, and if anyone in our unit had the knowledge necessary to avoid a mishap, it was I. Ah yes, but knowledge does NOT equal wisdom.

As soon as the last report cleared the commander's okay, I was cleared to press to Scotland for the family's annual September holiday. We had booked an apartment through the Scottish military at a great rate, and we were going to explore as much of the grand country as we could.

It was the second day of our Highland tour, and we were headed towards Inverary to tour the ancient home of the Duke of Argyle. I had the trip well planned (navigators are good at that) and we were off. I had compensated my estimated time of arrival (ETA) for the single-

lane mountainous roads, but not for the coal trucks doing their early-morning deliveries. I had a chance to pass all but one before we got into the real mountain roads. I might have gotten by that last one, but there was a wimpy driver in front of me who didn't seem nearly as anxious as I was to overtake this last truck. Now we were crawling up steep hills with bends and turns every eighth of a mile or less, and no clear places to pass. A few quick openings presented themselves, but the car in front of me didn't even take a serious look.

As five minutes stretched to ten, and then fifteen, my type-A personality started to get the better of me. My copilot (wife) was tuned into my growing frustration and started applying some good ORM. "Relax, honey. Just enjoy the beautiful day and this gorgeous scenery." I couldn't relax — I had a coal truck to pass, and all my attention was focused on finding an opening to do so... NOW! I was tired of eating diesel fuel from the truck and crawling up steep grades at 15 to 20 miles per hour. If only a straight stretch of road would come along.

Suddenly, there it was — about a quarter mile stretch of perfectly straight road and no cars coming down it! It was a steep grade, so the truck was just inching up the road, but the car in front of me did not even swing out to take a look. "Fine, lady!" I thought. "If you are not going to make a move, I will!" But now I had both the car and the truck to pass, and I probably couldn't do it before the 90-degree turn at the top. However, after the turn, there was another quarter-mile straight stretch and I had been watching it as we climbed and had seen no other cars coming from the opposite direction. Granted, there was one little mound of earth about halfway down that second stretch of road, which I couldn't see behind, but since I had been watching so diligently, I was sure no car had materialized. As I started to pull out of my lane into the oncoming one, my copilot once again injected her sage advice with a pointed question, "Are you SURE no one is coming?" I was committed to passing and nothing else at this point. I was 99percent certain and responded with, "It's clear!"

Well, the good Lord gave me one last chance to APPLY a little of this ORM knowledge I had, because about half-way up the first quarter-mile stretch, I realized I wouldn't be able to overtake both the car and the truck prior to the unknown when we made the turn at the top in tandem, blocking both lanes. There was no shoulder (or verge, as the British call it) for a margin of error, and it was solid granite on one side, and a several-hundred foot plunge on the other.

My final decision made, I floored the gas pedal to eat up as much of that coal truck as possible before I made my blind left turn. As we both rounded that corner and I could now see what was in my lane for the next quartermile stretch of road. My most vivid memory is the image of the smoke from the tires on that car only 100 yards off my nose. When he saw his lane filled with my Volvo and no place to go, brakes were his only option. It was slow motion at this point for me and, of course, I hit my brakes as well and dove the car back to my left lane (we are in Great Britain, remember). I narrowly missed the rear fender of the coal truck as I slid in, and I vividly remember the other car whizzing past my right-hand driver's window within inches. Now I could hear his skid as well as smell the burned rubber. I don't think anyone had time for horns.

I don't know if you've ever had one of those experiences where you feel like you wish you could crawl off to a corner and hide, but, man, did I want to disappear! My three sons all sat in the back just looking at me as if I were an idiot (which, in that moment, I was). My wife so graciously said absolutely nothing for the next several minutes. As Murphy's Law would have it, the road soon flattened out and there were numerous stretches to pass on. My selfinflicted penance required me to stay behind that lumbering coal truck until he decided to turn off. But as the other cars, which had been queued up behind me (and of course had witnessed the whole near-calamity), all took their turns in overtaking my vehicle and the coal truck in front of me, each cast withering glances in my direction. Some actually opened their mouths in shock when they saw my three young lads in the back seat. "Not only was this driver an idiot, who almost killed his wife, himself, and some innocent couple in the oncoming lane, he had three precious children

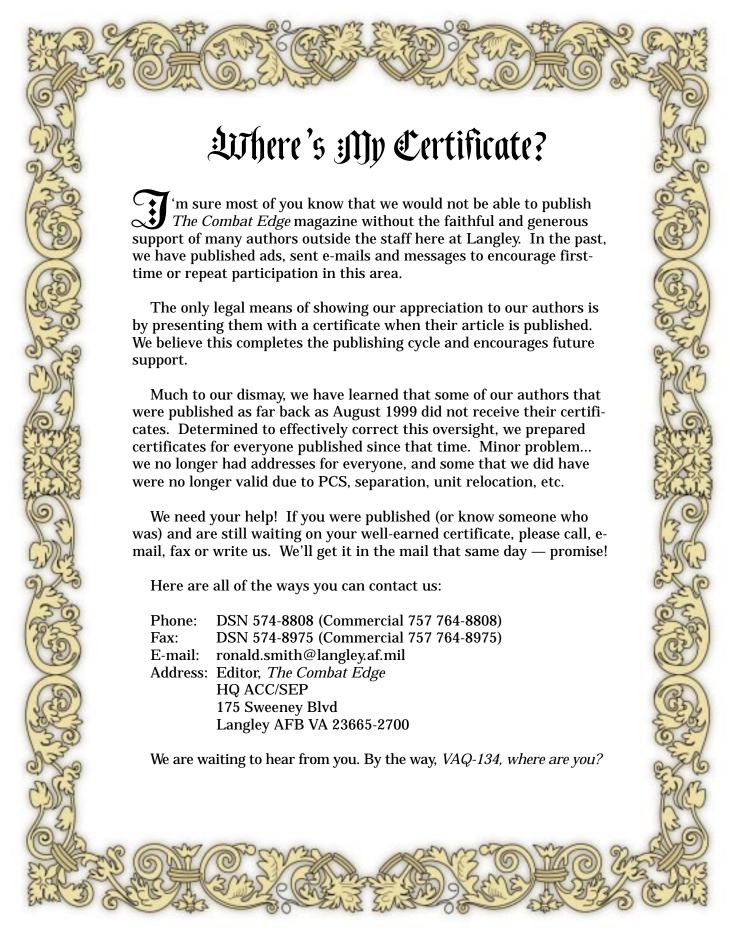
along for the sheer insanity of it." I kept receiving visions of the safety report to ACC stating how one of their squadrons' Chiefs of Safety killed himself and his entire family in the Scotland Highlands while attempting to overtake a coal truck on a 90-degree turn.

When words finally came to me, after the apologies to my entire family, I wondered at the fact that the car behind the coal truck had dropped far enough back to allow my Volvo room when I needed to dive back into my proper lane. The more I thought about it, the more I came to the realization that her use of ORM principles had not only saved my family's lives, but hers as well. If she had not dropped way behind when she saw what I was attempting, I would surely have pushed her over the cliff in my blind scramble back into that lane, and I would not have gotten out of the way of the head-on collision by mere inches.

ORM knowledge: I had a wealth of it, but I couldn't apply even the smallest amount in the right situation. I'm still here today, along with my precious family, by the grace of God alone, and by a "wimpy" Scottish lass who probably never heard of ORM, but in her wisdom knew enough to stay clear of the idiot driver trying to kill everyone on the road that day. I had firmly decided that at the first stop sign or traffic light I came to, I would quickly set the brake and dash back to her car. I would apologize, thank her, and offer her a measly £20 note to let her know I was grateful. As we neared the first small village, I checked my rearview mirror, but she was gone. She probably saved my life a second time from being hit while attempting to make-up for my first error.

The difference between knowledge and wisdom can be huge. I gained some wisdom that day that far exceeded all the knowledge I had. Experience is often the best teacher. But some of you will become wise by just hearing how foolish others can be at times. I shared this story in my next squadron safety meeting, and have used it a few times in my role as a wing Chief of Safety. Now I share it with a larger audience, recognizing the key to safety (i.e. ORM) is not mere knowledge, but the wisdom to use it at all the right times.

"Drive Safe" is not a motto, it's a practice used by the wise. ■





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HOW TO PROTECT YOUR PROPERTY

Make a list of items to bring inside in the event of a storm. A list will help you remember anything that can be broken or picked up by strong winds. Hurricane winds, often in excess of 100 miles per hour, can turn unanchored items into deadly missiles, causing damage or injury when they hit.

Keep trees and shrubbery trimmed. Make trees more wind resistant by removing diseased or damaged limbs then strategically remove branches so that wind can blow through. Hurricane winds frequently break weak limbs and hurl them at great speed, causing great damage when they hit property. Debris collection services may not be operating just before a storm, so it is best to do this well in advance of approaching storms.

Remove any debris or loose items in your yard. Hurricane winds can pick up anything unsecured, creating damage to property when the debris hits.

Clear loose and clogged rain gutters and downspouts. Hurricanes often bring long periods of heavy rain. Providing clear drainage will help prevent misdirected flooding.

Install permanent hurricane shutters. Hurricane shutters provide the best protection for your windows and doors. Taping windows could take critical time from more effective preparedness measures. All tape does is help prevent glass from broken windows from scattering all over inside. Tape does not prevent windows from breaking. Cover the outside of windows

with shutters or plywood.

If you do not have permanent hurricane shutters, install anchors for plywood (mare plywood is best) and pre-drill holes in pre-cut half-inch outdoor plywood boards so that you can cover the windows of your home quickly. Mark which board fits which window. Most homes destroyed during recent hurricanes had no window protection. When wind enters a home through broken windows, the pressure builds against the walls and can lift roofs, followed by collapsing walls.

Install protection to the outside areas of sliding glass doors. Glass doors are as vulnerable as windows to breakage by wind-driven objects.

Well ahead of time, buy any other items needed to board up windows and protect your home. When a hurricane threatens, supplies are quickly sold out at many stores. Stock may not be replenished until after the storm.

Strengthen garage doors. Many houses are destroyed by hurricane winds that enter through damaged garage doors, lifting roofs, and destroying the remainder of the house.

Have an engineer check your home and advise about ways to make it more resistant to hurricane winds. There are a variety of ways to protect your home. Professionals can advise you of engineering requirements, building permits or requirements of local planning and zoning departments to provide the most effective protection.

Elevate coastal homes. Raising houses to a certain height will make them more resistant to hurricane-driven waters. There may be many local codes affecting how and where homes can be elevated. Meet with your emergency manager or planning and zoning official for a description of the process to have your home elevated. There may also be community funds available for such measures.

If you live in a flood plain or are prone to flooding, also follow flood preparedness precautions. Hurricanes can bring great amounts of rain and frequently cause floods. Some hurricanes have dropped more than 10 inches of rain in just a few hours.

WHAT TO DO DURING A HURRICANE WATCH

Continue listening regularly to a NOAA Weather Radio or local radio or television stations for updated information. Hurricanes can change direction, intensity, and speed very suddenly. What was a minor threat several hours ago can quickly escalate to a major threat.

Listen to the advice of local officials, and evacuate if they tell you to do so. Avoid flooded roads and watch for washed-out bridges. Leaving an area that may be affected will help keep your family safe. Local officials may call for evacuation in specific areas at greatest risk in your community. Following the advice of local authorities is your safest protection. Local officials may close down certain roads, especially near the coast, when the outer effects of increasing wind and rain from a hurricane reach the coast.

Prepare your property for high winds. Hurricane winds can blow large, heavy objects and send them crashing into homes. Anything not secured may become a deadly or damaging projectile.

- Bring lawn furniture inside, as well as outdoor decorations or ornaments, trash cans, hanging plants, or anything else that can be picked up by the wind.
- Make trees more wind resistant by removing diseased and damaged limbs then strategically remove branches so that wind can blow through.
- Secure building by closing and boarding up each window of your home. Remove outside antennas.
- Moor boat securely or move it to a designated safe place. Use ropes or chain to secure boat to trailer. Use tie-downs to anchor trailer to the ground or house.

Fill your car's gas tank. If advised to evacuate, you may have to travel long distances or be caught in traffic, idling for long periods of time. Gas stations along the route may be closed.

Stock up on prescription medications. Stores and pharmacies may be closed after the storm.

Recheck manufactured home tie-downs. Manufactured homes may not be as affected by strong winds if they are tied down according to the manufacturer's instructions. Properly tied down homes are more likely to stay fixed to their foundations.

Check your Disaster Supplies Kit. Some supplies may need to be replaced or restocked.

Turn refrigerator and freezer to coldest setting. Open only when absolutely necessary and close quickly. Keeping the coldest air in will help perishables last much longer in the event of a power failure.

Store valuables and personal papers in a safety deposit box in a waterproof container on the highest level of your home. Hurricanes leave much water damage inside homes. Historically, it is shown that protecting valuables in this manner will provide the best security.

Turn off utilities if told to do so by authorities. Authorities may ask you to turn off water or electric utilities to prevent damage to your home or within the community. Most of the time they will tell you to leave the gas on because a professional is required to turn your gas back on, and it may be several weeks before you receive service.

Turn off propane tanks. Propane tanks may be damaged or dislodged by strong winds or water. Turning them off reduces the fire potential if they are damaged by the storm.

Unplug small appliances. Small appliances may be affected by electrical power surges that may occur as the storm approaches. Unplugging them reduces potential damage.

Review evacuation plan. Make sure your planned route is the same as the currently recommended route. Sometimes roads may be closed or blocked, requiring a different route.

Stay away from floodwaters. If you come upon a flooded road, turn around and go another way. When you are caught on a flooded road and waters are rising rapidly around you, if you can do so safely, get out of your vehicle and climb to higher ground. Floods cause most hurricane-related deaths and most flood fatalities are caused by people attempting to drive through